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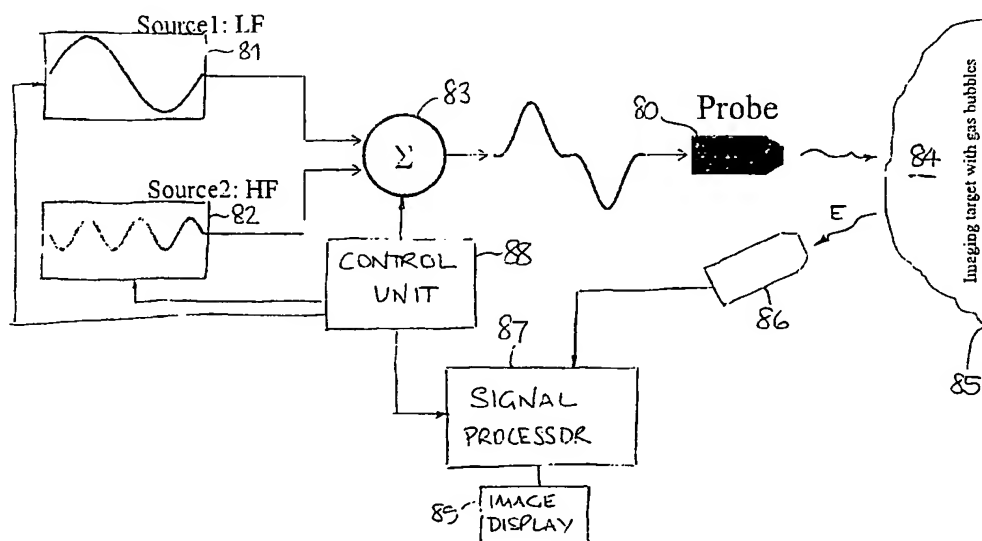
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(54) Title: **CONTRAST DUAL FREQUENCY IMAGING**



(57) Abstract: A method and apparatus for ultrasound imaging which uses dual frequency excitation of a target. The target is simultaneously irradiated with a relatively low frequency ultrasound conditioning signal and a relatively high frequency ultrasound detection signal. The conditioning signal modulates a physical property (e.g. size) of first structures (e.g. gas bubbles) within the target, which modulation causes changes in the echo signal response of the first structures to the detection signal. A signal processor is adapted to process the received echo signals to detect the presence of the first structures by virtue of a first magnitude of detection signal echo arising from periods when the conditioning signal is in a first phase and a second, different, magnitude of detection signal echo arising from periods when the conditioning signal is in a second phase.